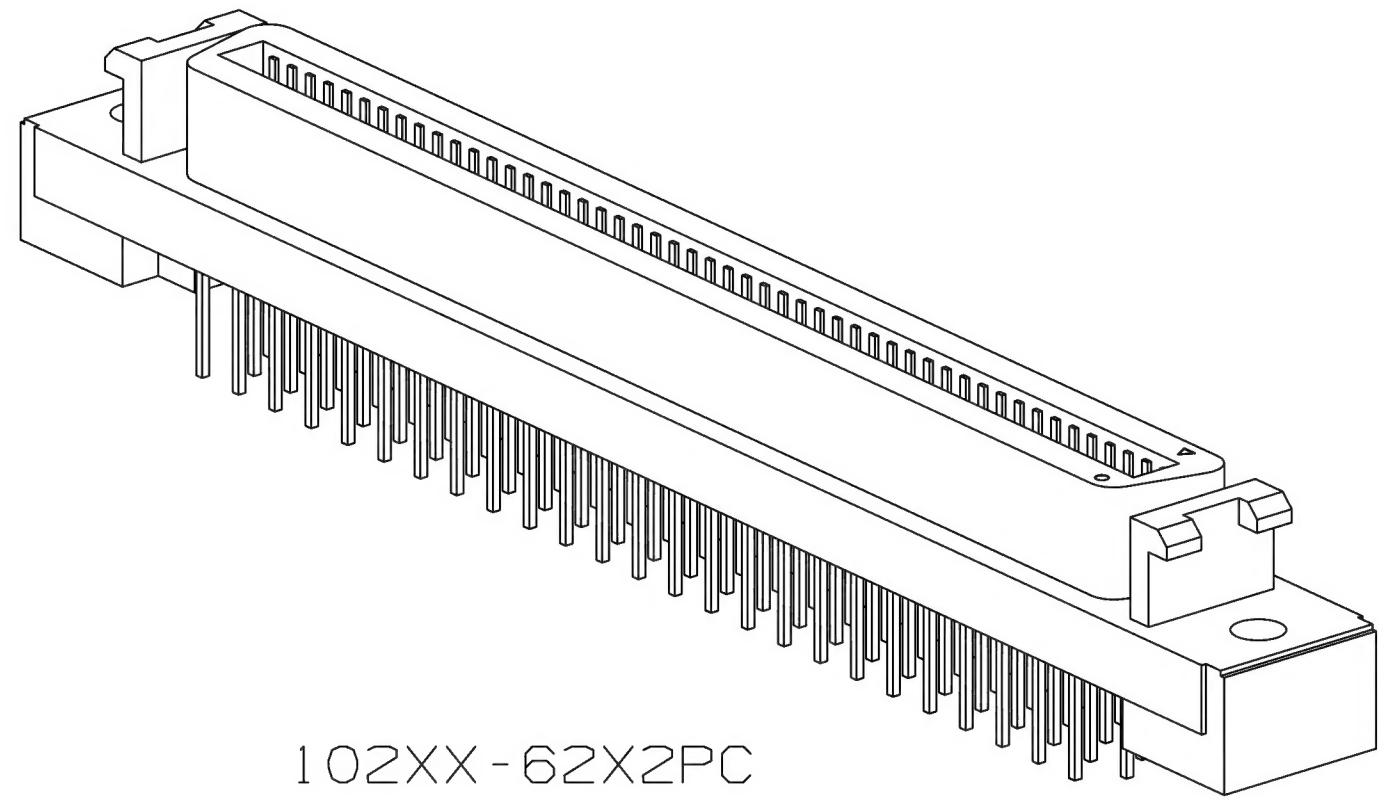


3M™ MINI D RIBBON (MDR) CONNECTORS, 102 SERIES  
.050" BOARDMOUNT THROUGHT-HOLE VERTICAL RECEPTACLE - SHIELDED



102XX-62X2PC

2 PHYSICAL :

INSULATOR:  
MATERIAL: GLASS FILLED POLYESTER (PBT) OR  
GLASS FILLED POLYESTER (PCT) -  
HIGH TEMP OPTION - SEE ORDERING INFORMATION  
FLAMMABILITY: UL94V-0  
COLOR: BLACK (PBT) OR BEIGE (PCT) - HIGH TMP - SEE ORDERING INFO.  
CONTACT:  
MATERIAL: COPPER ALLOY  
PLATING:  
UNDER PLATING: 100µ" (2.54µm) AVG. NICKEL-OVERALL  
WIPING AREA: 30µ" (0.76µm) MIN. GOLD  
SOLDER TAILS: GOLD FLASH OVER NICKEL  
BODY:  
MATERIAL: ZINC ALLOY  
PLATING: NICKEL  
SHROUD & LATCH HOOK:  
MATERIAL: STEEL  
PLATING: NICKEL  
MARKINGS: 3M LOGO AND PART NUMBER

2 ELECTRICAL :

CURRENT RATING: 1A  
INSULATION RESISTANCE: >5 X 10<sup>9</sup>Ω AT 500 V<sub>DC</sub>  
WITHSTANDING VOLTAGE: 500V<sub>RMS</sub> FOR 1 MINUTE

2 ENVIRONMENTAL :

TEMPERATURE RATING: -55°C TO +85°C  
PBT INSULATOR PROCESS RATING: SOLDER DIP TEST -260°C FOR 10 SEC.,  
2 TIMES AFTER 100°C MAX. PREHEAT, 60 SEC.  
MAX. DURATION.  
PCT INSULATOR PROCESS RATING: HIGH TEMP. OPTION: 260°C (PROFILE PER J-STD-020C)

ORDERING INFORMATION

X 102XX-62X2PC

BLANK = STAND, PBT INSULATOR  
N = HIGH TEMP. OPTION, PCT INSULATOR

CONTACT QTY.  
A0 = 100 POS.  
(SEE TABLE)

LOCKSTAND THREAD  
0 = M2.6 (SPECIAL)  
1 = M2.5 (STANDARD)

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**cus**  
UL FILE NO: E68080

DIMENSIONS: INCHES [MM]  
[MM] IS FOR REF. ONLY

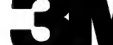

DESIGN REFERENCE		NEXT ASSEMBLY	
ACCESS CODES			
DIVISION		DIVISION CODE	
DO NOT SCALE DRAWING		SCALE 3 1	
THIRD ANGLE PROJECTION		TOLERANCES EXCEPT AS NOTED	
INTERPRET PER ASME Y14.5 - 2018		MILLIMETERS	
MAX. SURFACE ROUGHNESS		ANGLES	
ALL SURFACES			
MARKED ONLY			

C	105842	JUL 13,2022	JNC	FJR
B	16859	NOV 26,2022	BAC	ARM
A	16859	MAR 05,2007	BAC	DFC
REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
DRFT	CAS	IGL	ONE	
CHKD		DATE	DATE	DATE
APPRV		F. RODRIGUEZ		
DATE		JUL 13,2022		
3M Center		St. Paul, MN 55144		
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TITLE				
MDR CONN, SHIELDED, .050" BMT THRU-HOLE VERT RECEPTACLE				
CAGE NUMBER	SIZE	DRAWING NO.	REV.	
D	102	78-5100-0427-4	C	
MODEL		SHT 1 OF 4		
LISTS		YES NO		

## D



A

DESIGN REFERENCE		NEXT ASSEMBLY		REV	ECO	ISSUE DATE AND DESCRIPTION		DRFT	CHKD
ACCESSORIES				BYP	CST	JUL 13, 2022		MFB	
				CHKD		DATE		APPRV	DATE
								F. RODRIGUEZ	JUL 13, 2022
DIVISION		DIVISION CODE		© 3M COPYRIGHT 2022					
		00000		<div>  <div> <div>3M Center</div> <div>St. Paul,</div> <div>MN 55144</div> </div> </div>					
DO NOT SCALE DRAWING		SCALE $\frac{3}{1}$		This document and the information it contains are 3M property and may not be reproduced or further distributed without 3M permission, or used or disclosed other than for 3M authorized purposes. All rights reserved.					
		TOLERANCES EXCEPT AS NOTED		TITLE					
		INCHES .00 ± .01 .000 ± .005 .0000 ± .0002		MDR CONN, SHIELDED, .050" BMT THRU-HOLE VERT RECEPTACLE					
THIRD ANGLE PROJECTION		MILLIMETERS 0 ±		CAGE NUMBER					
INTERPRET PER ASME Y14.5 - 2018		.0 ± .00 ± .000 ±		DRAWING NO. <b>D</b> 78-5100-0427-4					
MAX SURFACE ROUGHNESS		<input type="checkbox"/> ALL SURFACES <input checked="" type="checkbox"/> MARKED ONLY		REV. C					
<input checked="" type="checkbox"/>		ANGLES ±		MODEL 102 DET. STS. YES NO SHT 2 OF 4					

3M™ MINI D RIBBON (MDR) CONNECTORS, 102 SERIES  
.050" BOARDMOUNT THROUGH-HOLE VERTICAL RECEPTACLE - SHIELDED

TABLE 2		
CONTACT QTY.	DIM. "A"	DIM. "B"
20	.450 [ 11.43 ]	1.081 [ 27.45 ]
36	.850 [ 21.59 ]	1.481 [ 37.61 ]
40	.950 [ 24.13 ]	1.581 [ 40.15 ]
68	1.650 [ 41.91 ]	2.281 [ 57.93 ]
80	1.950 [ 49.53 ]	2.581 [ 65.55 ]
100	2.450 [ 62.23 ]	3.081 [ 78.25 ]

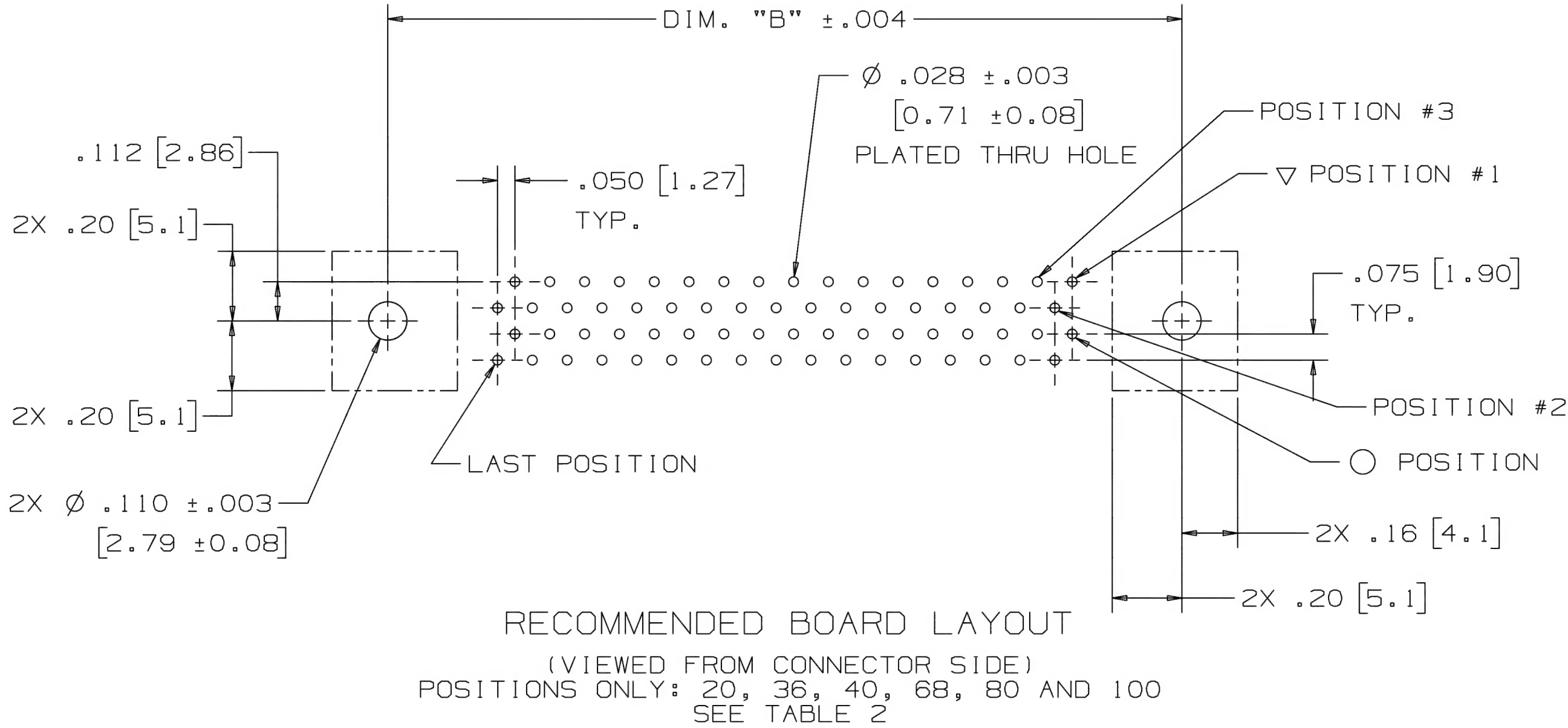


TABLE 3		
CONTACT QTY.	DIM. "A"	DIM. "B"
14	.300 [ 7.62 ]	.931 [ 23.64 ]
26	.600 [ 15.24 ]	1.231 [ 31.26 ]
50	1.200 [ 30.48 ]	1.831 [ 46.50 ]

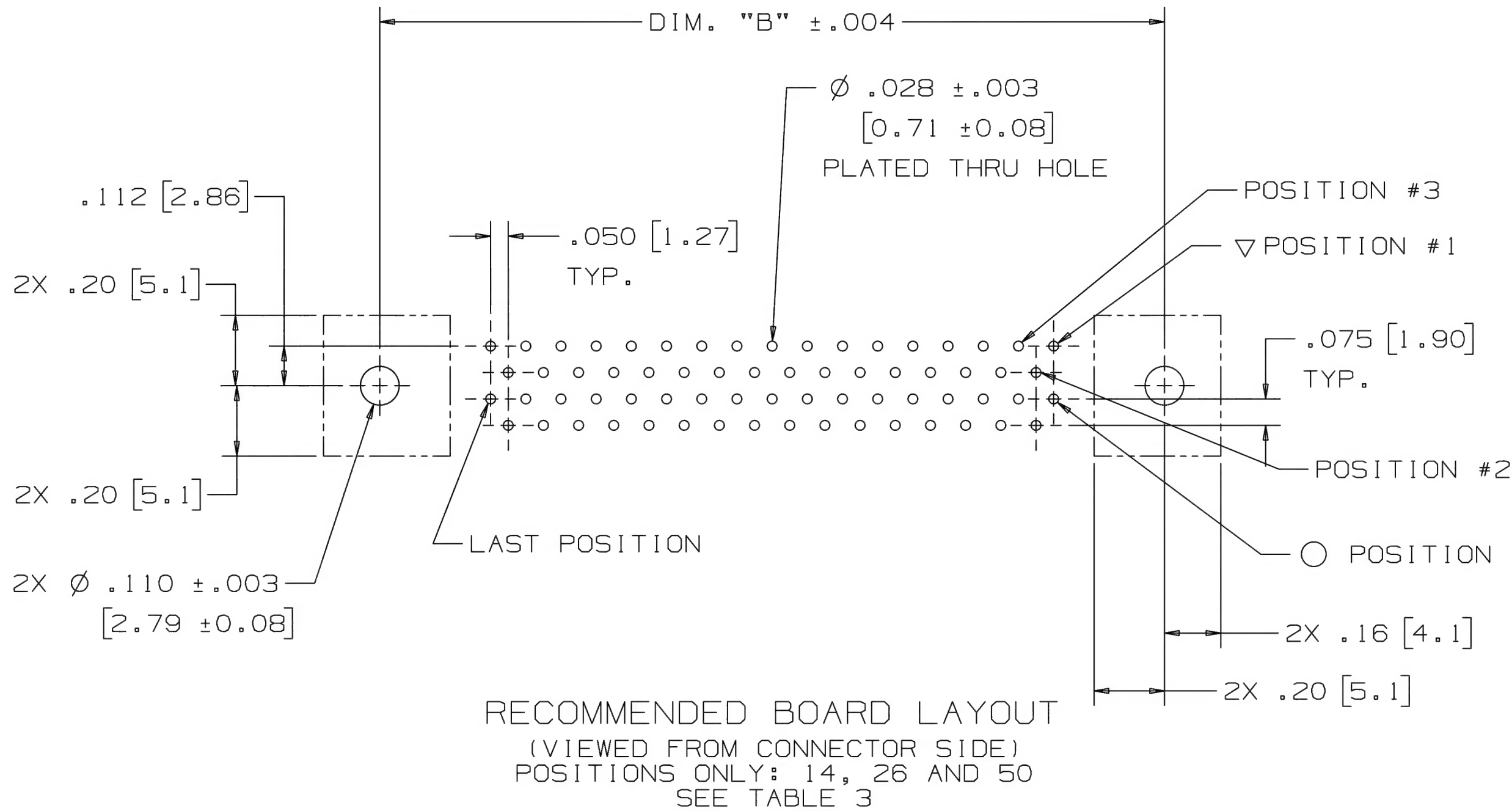
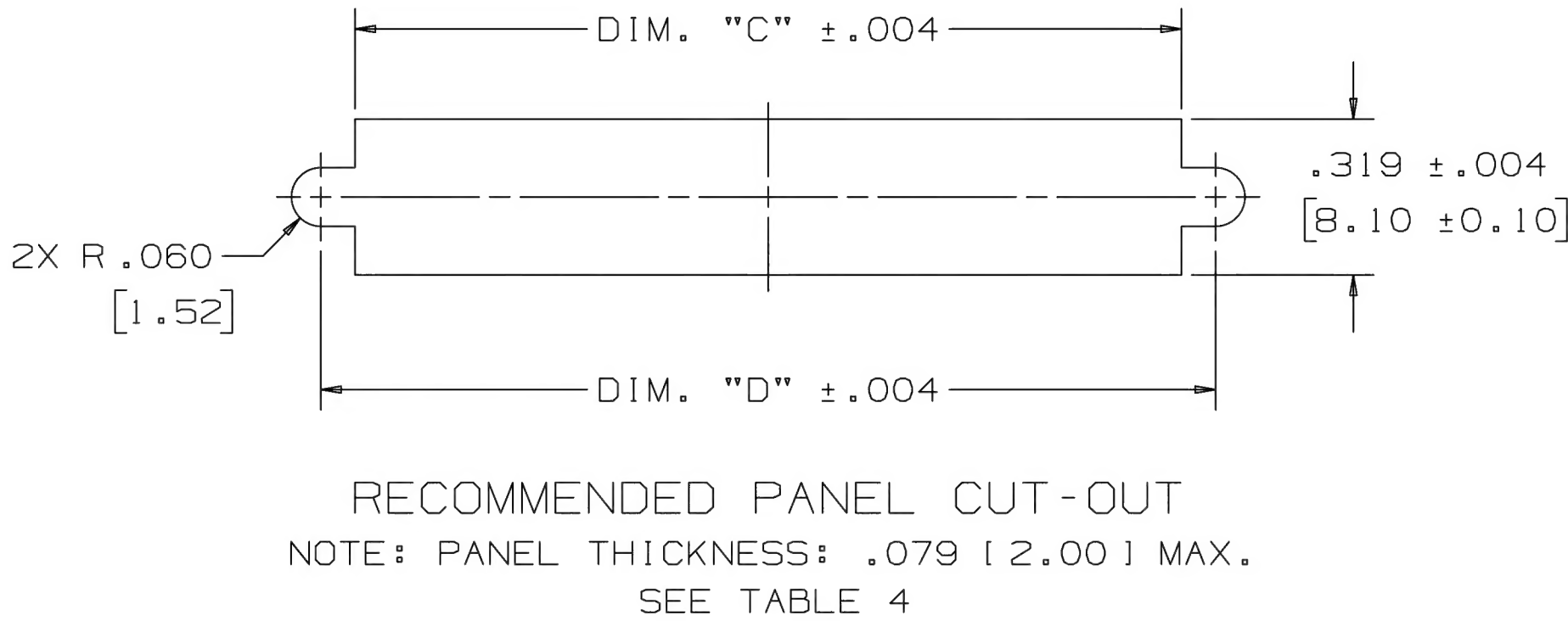


TABLE 4		
CONTACT QTY.	DIM. "C"	DIM. "D"
14	.78 [ 20.0 ]	.93 [ 23.64 ]
20	.94 [ 23.8 ]	1.08 [ 27.45 ]
26	1.09 [ 27.6 ]	1.23 [ 31.26 ]
36	1.33 [ 33.9 ]	1.48 [ 37.61 ]
40	1.44 [ 36.5 ]	1.58 [ 40.15 ]
50	1.69 [ 42.8 ]	1.83 [ 46.50 ]
68	2.13 [ 54.2 ]	2.28 [ 57.93 ]
80	2.44 [ 61.9 ]	2.58 [ 65.55 ]
100	2.94 [ 74.6 ]	3.08 [ 78.25 ]



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NOTES  
1. RECOMMENDED PC BOARD THICKNESS  
OF .062".

DESIGN REFERENCE		NEXT ASSEMBLY		REV	ECO	ISSUE DATE AND DESCRIPTION		DRFT	CHKD
ACBSP	CODES	ACBSP	CODES	DRFT	CASTIGLIONE	DATE	JUL 13, 2022	WFS	DATE
DIVISION		DIVISION CODE		CHKD		DATE		APPR	DATE
DO NOT SCALE DRAWING		SCALE 3/1		TOLERANCES EXCEPT AS NOTED		INCHES .00 ±.01 .000 ±.005 .0000 ±.0002		MILLIMETERS 0 ±.00 ±.000 ±.000	
THIRD ANGLE PROJECTION		INTERPRET PER ASME Y14.5 - 2018		MAX. SURFACE ROUGHNESS		ALL SURFACES		MARKED ONLY	
CAGE NUMBER		SIZE		DRAWING NO.		REV.		MODEL	
102		102		D78-5100-0427-4		C		SHT 3 OF 4	



3M™ MINI D RIBBON (MDR) CONNECTORS, 102 SERIES  
.050" BOARDMOUNT THROUGH-HOLE VERTICAL RECEPTACLE - SHIELDED

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C		105842	JUL 13,2022		JNC	FJR
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DRFT		CAS	JUL 13,2022		WFS	
CHKD			DATE		APPR	DATE
			F. RODRIGUEZ		JUL 13,2022	
DIVISION		DIVISION CODE				
		EMSD				
DO NOT SCALE DRAWING		SCALE 4 1		TOLERANCES EXCEPT AS NOTED		
THIRD ANGLE PROJECTION		INCHES .0 ±.1 .00 ±.01 .000 ±.005 .0000 ±.0002		MILLIMETERS 0 ±.1 .00 ±.01 .000 ±.0002		
MAX SURFACE ROUGHNESS		ALL SURFACES		CAGE NUMBER		
MARKED ONLY		ANGLES		DRAWING NO. 102		
				REV. C		
				DET. YES NO SHT 4 OF 4		